WHAT IS CLAIMED IS:

1. A focus control apparatus which controls a focus of an objective lens for focusing light against an optical disk having a plurality of signal recorded layers, comprising:

focus drive means for moving the objective lens in a direction orthogonal to the recorded layers of the optical disk;

photodetection means for detecting reflected light from said optical disk;

focus-error-signal generation means for generating a focus error signal which corresponds to defocusing of said objective lens relative to any of said recorded layers of said optical disk, on the basis of a detection signal of said photodetection means;

recorded-layer movement control means for generating a signal which controls said focus drive means, on the basis of the error signal, in order to move said objective lens on the recorded layer which is an objective of said objective lens; and

focus pull-in means for pulling in the focus of said objective lens onto said recorded layer on which said objective lens is to be focused, said pull-in means being permitted to switch ON/OFF by said recorded-layer movement control means;

wherein said recorded-layer movement control means calculates an intermediate value from a maximum value and a minimum value of

said focus error signal corresponding to the certain recorded layer; and

in case of moving the focused position of said objective lens to said recorded layer, said focus pull-in means is turned ON when said focus error signal has corresponded to the intermediate value.

2. An optical disk playback system comprising the focus control apparatus as defined in Claim 1.

3. An optical disk playback system as defined in Claim 2, wherein a process in which said recorded-layer movement control means calculates said intermediate value from the maximum value and the minimum value of said focus error signal corresponding to said certain recorded layer is executed in advance of playback of said optical disk.

4. A focus control apparatus wherein a layer jump of an objective lens is controlled for an optical disk having a plurality of signal recorded layers, comprising:

means for obtaining an intermediate value from a maximum value and a minimum value of a focus error signal which corresponds to defocusing of the objective lens, and which is generated by a certain one of the recorded layers; and

means for turning ON a focus servo which pulls in a focus of said objective lens, with a bias at which the focus error signal corresponds to the intermediate value, in case of the layer jump to the recorded layer.

5. A method of controlling a layer jump of an objective lens for an optical disk having a plurality of signal recorded layers, comprising the following steps of:

obtaining an intermediate value from a maximum value and a minimum value of a focus error signal which corresponds to defocusing of the objective lens, and which is generated by a certain one of the recorded layers; and

turning ON a focus servo which pulls in a focus of said objective lens, with a bias at which the focus error signal corresponds to the intermediate value, in case of the layer jump to the recorded layer.

6. A program for controlling a layer jump of an objective lens, executable by an apparatus which plays back an optical disk having a plurality of signal recorded layers, causing said playback apparatus to:

obtain an intermediate value from a maximum value and a minimum value of a focus error signal which corresponds to defocusing of the objective lens, and which is generated by a certain one of the recorded layers; and

turn on a focus servo which pulls in a focus of said objective lens, with a bias at which the focus error signal corresponds to the intermediate value, in case of the layer jump to the recorded layer.

7. A storage medium recorded with the program product as defined in Claim 6.